RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: *10/573,998*
Source: *TH/WP*
Date Processed by STIC: *4-13-06*

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RAW SEQUENCE LISTING   DATE: 04/13/2006
PATENT APPLICATION: US/10/573,998   TIME: 13:18:04

Input Set : **A:\BCS 03-5004_PCT-SEQUENZPROTOKOLL.ST25.txt**
Output Set: **N:\CRF4\04132006\J573998.raw**

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  3 <110> APPLICANT: Bayer CropScience GmbH
  5 <120> TITLE OF INVENTION: Plants with reduced activity of a Class 3 branching enzyme
  7 <130> FILE REFERENCE: BCS 03-5004-PCT
C-->  9 <140> CURRENT APPLICATION NUMBER: US/10/573,998
C-->  9 <141> CURRENT FILING DATE: 2006-03-30
  9 <150> PRIOR APPLICATION NUMBER: EP 03090325.62003
 10 <151> PRIOR FILING DATE: 2003-09-30
 12 <160> NUMBER OF SEQ ID NOS: 6
 14 <170> SOFTWARE: PatentIn version 3.1
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 1004
 18 <212> TYPE: DNA
 19 <213> ORGANISM: Solanum tuberosum
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 30 ttcactggct aaccgtcgct gggatctatt ggaagatgtt gtacattatc aattgttctc    300
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 36 ctttgtgttc aactttcatc ctgtcaattc atatgaaaga tacattatag gtgtggaaga    480
 38 agctggagag tatcaagtca cattaaatac agatgaaaac aagtatggtg gtagaggact    540
 40 acttggccat gatcagaata ttcaaagaac cattagtaga agagctgatg gaatgagatt    600
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 48 gagcagactg ttggctagtc aattatcatg aactttgcc ttcagcatcc ggatagtcgc    840
 50 ttctcctgtg caatgagggc atggacgaat ttttttttgg cttgtcatgg gggtcataag    900
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 67 ccgggctcga gtttcgaggt gtagatgctc agcaacggag caaccgccac cgcaacgacg    180
 69 gaagcaacga ccggagaagt acaaacagtc ggaggaaggg aaaggaatcg atcctgttgg    240
 71 atttctcagc aaatacggca ttactcataa agcgtttgct caatttcttc gtgaaagata    300
 73 taaatcattg aaggacttga aggatgaaat attgactcgt catttcagtc tcaaggagat    360
 75 gtctactggg tatgaattaa tgggtatgca tcgcaacata caacatcgag tggatttctt    420
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 83 caattatgcg gaggactatg gtaaaggtga cacgggtatt accgtcgagg aaatctttaa   660
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 87 ggtggcagca aagtatatg  aggaaatgtt cggaccaaat ggacctcaaa cagaagagga   780
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 91 ggatccggca agcaatttgc catcgtatga tgtggtagat agtggaaaag aatatgatat   900
 93 ttacaatatt ataggtgatc ctgaatcgtt taagaaattt cgtatgaaac agcctcctat   960
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121 catggatgaa tactgtaacc aatatgttga caaggaggcc ttattgtacc tcatattagc   1800
123 aaatgaagta ttacatgctc ttcatcctaa tgtgatcacg attgctgagg atgcaactct   1860
125 gtatcctgga ctctgcgatc caacatctca aggtggactg ggctttgatt attttgccaa   1920
127 tctttctgcc tcagagatgt ggcttgcatt acttgaaaat actcctgatc atgaatggtg   1980
129 catgagtaag attgttagca cattagtggg cgatagacaa aatactgata aaatgctttt   2040
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149                                          Met Leu Ser Leu Ser Asp
150                                           1               5
152 tca att cga att tct tca cca ttg agc gat tct cgt ctt agt ttt cta   164
153 Ser Ile Arg Ile Ser Ser Pro Leu Ser Asp Ser Arg Leu Ser Phe Leu
154          10              15               20
156 tct caa acc gga agc aga acc agt cgc cag ctt aaa ttt gtt cgc agc   212
157 Ser Gln Thr Gly Ser Arg Thr Ser Arg Gln Leu Lys Phe Val Arg Ser
158        25               30               35
160 cgc cgg gct cga gtt tcg agg tgt aga tgc tca gca acg gag caa ccg   260
161 Arg Arg Ala Arg Val Ser Arg Cys Arg Cys Ser Ala Thr Glu Gln Pro
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164 cca ccg caa cga cgg aag caa cga ccg gag aag tac aaa cag tcg gag        308
165 Pro Pro Gln Arg Arg Lys Gln Arg Pro Glu Lys Tyr Lys Gln Ser Glu
166  55                   60                  65                  70
168 gaa gag aaa gga atc gat cct gtt gga ttt ctc agc aaa tac ggc att        356
169 Glu Glu Lys Gly Ile Asp Pro Val Gly Phe Leu Ser Lys Tyr Gly Ile
170             75                  80                  85
172 act cat aaa gcg ttt gct caa ttt ctt cgt gaa aga tat aaa tca ttg        404
173 Thr His Lys Ala Phe Ala Gln Phe Leu Arg Glu Arg Tyr Lys Ser Leu
174             90                  95                 100
176 aag gac ttg aag gat gaa ata ttg act cgt cat ttc agt ctc aag gag        452
177 Lys Asp Leu Lys Asp Glu Ile Leu Thr Arg His Phe Ser Leu Lys Glu
178            105                 110                 115
180 atg tct act ggg tat gaa tta atg ggt atg cat cgc aac ata caa cat        500
181 Met Ser Thr Gly Tyr Glu Leu Met Gly Met His Arg Asn Ile Gln His
182     120                 125                 130
184 cga gtg gat ttc ttg gaa tgg gct cca ggt gct cgc tac tgt gct ctg        548
185 Arg Val Asp Phe Leu Glu Trp Ala Pro Gly Ala Arg Tyr Cys Ala Leu
186 135                 140                 145                 150
188 att ggt gac ttc aat ggg tgg tca aca act ggt aac tgt gcc aga gag        596
189 Ile Gly Asp Phe Asn Gly Trp Ser Thr Thr Gly Asn Cys Ala Arg Glu
190                 155                 160                 165
192 ggt cat ttt ggt cat gac gat tat ggg tat tgg ttt att att ctt gaa        644
193 Gly His Phe Gly His Asp Asp Tyr Gly Tyr Trp Phe Ile Ile Leu Glu
194             170                 175                 180
196 gat aaa tta cgt gaa gga gaa gaa cct gat aaa ttg tat ttt caa cag        692
197 Asp Lys Leu Arg Glu Gly Glu Glu Pro Asp Lys Leu Tyr Phe Gln Gln
198            185                 190                 195
200 tac aat tat gcg gag gac tat gat aaa ggt gac acg ggt att acc gtc        740
201 Tyr Asn Tyr Ala Glu Asp Tyr Asp Lys Gly Asp Thr Gly Ile Thr Val
202     200                 205                 210
204 gag gaa atc ttt aaa aaa gca aat gat gag tat tgg gaa cct gga gaa        788
205 Glu Glu Ile Phe Lys Lys Ala Asn Asp Glu Tyr Trp Glu Pro Gly Glu
206 215                 220                 225                 230
208 gat cgc ttc att aaa tca cgt tat gag gtg gca gca aag tta tat gag        836
209 Asp Arg Phe Ile Lys Ser Arg Tyr Glu Val Ala Ala Lys Leu Tyr Glu
210                 235                 240                 245
212 gaa atg ttc gga cca aat gga cct caa aca gaa gag gaa cta gaa gca        884
213 Glu Met Phe Gly Pro Asn Gly Pro Gln Thr Glu Glu Glu Leu Glu Ala
214             250                 255                 260
216 atg cct gat gca gct aca cga tac aaa act tgg aaa gag caa caa aaa        932
217 Met Pro Asp Ala Ala Thr Arg Tyr Lys Thr Trp Lys Glu Gln Gln Lys
218             265                 270                 275
220 aag gat ccg gca agc aat ttg cca tcg tat gat gtg gta gat agt gga        980
221 Lys Asp Pro Ala Ser Asn Leu Pro Ser Tyr Asp Val Val Asp Ser Gly
222     280                 285                 290
224 aaa gaa tat gat att tac aat att ata ggt gat cct gaa tcg ttt aag       1028
225 Lys Glu Tyr Asp Ile Tyr Asn Ile Ile Gly Asp Pro Glu Ser Phe Lys
226 295                 300                 305                 310
228 aaa ttt cgt atg aaa cag cct cct att gct tac tgg tta gaa act aaa       1076
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229 Lys Phe Arg Met Lys Gln Pro Pro Ile Ala Tyr Trp Leu Glu Thr Lys
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232 aag gga agg aaa ggc tgg tta cag aaa tat atg cct gct tta cct cat      1124
233 Lys Gly Arg Lys Gly Trp Leu Gln Lys Tyr Met Pro Ala Leu Pro His
234             330             335             340
236 gga agc aaa cac agg gtg tat ttt aac aca cca aat ggg cct ctt gaa      1172
237 Gly Ser Lys His Arg Val Tyr Phe Asn Thr Pro Asn Gly Pro Leu Glu
238             345             350             355
240 cga gtt cct gcg tgg gcc aat ttt gtc att cca gat gca gac ggg atg      1220
241 Arg Val Pro Ala Trp Ala Asn Phe Val Ile Pro Asp Ala Asp Gly Met
242     360             365             370
244 gca tta gca gtc cat tgg gaa cca cct cct gaa tat gct tat aaa tgg      1268
245 Ala Leu Ala Val His Trp Glu Pro Pro Pro Glu Tyr Ala Tyr Lys Trp
246 375             380             385             390
248 aaa cac aag cta cca gtc aag cct aag tcc ttg cgc ata tat gaa tgt      1316
249 Lys His Lys Leu Pro Val Lys Pro Lys Ser Leu Arg Ile Tyr Glu Cys
250             395             400             405
252 cat gtt ggc atc tct ggc cag gaa cca aaa gtt tca tct ttc aat gat      1364
253 His Val Gly Ile Ser Gly Gln Glu Pro Lys Val Ser Ser Phe Asn Asp
254             410             415             420
256 ttt att agc aag gtc ctt ccg cat gta aaa gaa gct gga tac aat gca      1412
257 Phe Ile Ser Lys Val Leu Pro His Val Lys Glu Ala Gly Tyr Asn Ala
258             425             430             435
260 acg caa att att gga gtt gtt gag cac aag gat tat ttc act gtt gga      1460
261 Thr Gln Ile Ile Gly Val Val Glu His Lys Asp Tyr Phe Thr Val Gly
262     440             445             450
264 tat aga gtg acc aat ttt tat gct gtt agt agc cgt tat ggc aca ccg      1508
265 Tyr Arg Val Thr Asn Phe Tyr Ala Val Ser Ser Arg Tyr Gly Thr Pro
266 455             460             465             470
268 gat gac ttc aag cgc ttg gtt gat gaa gca cat ggg ctt gga ctg ctt      1556
269 Asp Asp Phe Lys Arg Leu Val Asp Glu Ala His Gly Leu Gly Leu Leu
270             475             480             485
272 gtc ttt ttg gag att gtg cac tcc tat gca gca gca gat gaa atg gtt      1604
273 Val Phe Leu Glu Ile Val His Ser Tyr Ala Ala Ala Asp Glu Met Val
274             490             495             500
276 ggg tta tct ctt ttt gat gga gca aat gat tgc tat ttc cac act ggt      1652
277 Gly Leu Ser Leu Phe Asp Gly Ala Asn Asp Cys Tyr Phe His Thr Gly
278             505             510             515
280 aaa cgt gga cac cac aaa ttc tgg ggc aca cgg atg ttc aaa tat gga      1700
281 Lys Arg Gly His His Lys Phe Trp Gly Thr Arg Met Phe Lys Tyr Gly
282     520             525             530
284 gat cct gat gtt ctg cac ttt ctt ctt tca aat ctg aac tgg tgg gtg      1748
285 Asp Pro Asp Val Leu His Phe Leu Leu Ser Asn Leu Asn Trp Trp Val
286 535             540             545             550
288 gag gag tat cat gtc gat ggc ttc cat ttt cat tcg ctc tcg tcc atg      1796
289 Glu Glu Tyr His Val Asp Gly Phe His Phe His Ser Leu Ser Ser Met
290             555             560             565
292 ttg tat acg cat aat gga ttt gct tca ttt act ggt gac atg gat gaa      1844
293 Leu Tyr Thr His Asn Gly Phe Ala Ser Phe Thr Gly Asp Met Asp Glu
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301 Ala Asn Glu Val Leu His Ala Leu His Pro Asn Val Ile Thr Ile Ala
302     600              605              610
304 gtg gat gca act ctg tat cct gga ctc tgc gat cca aca tct caa ggt    1988
305 Val Asp Ala Thr Leu Tyr Pro Gly Leu Cys Asp Pro Thr Ser Gln Gly
306 615              620              625              630
308 gga ctg ggc ttt gat tat ttt gcc aat ctt tct gcc tca gag atg tgg    2036
309 Gly Leu Gly Phe Asp Tyr Phe Ala Asn Leu Ser Ala Ser Glu Met Trp
310              635              640              645
312 ctt gca tta ctt gaa aat act cct gat cat gaa tgg tgc atg agt aag    2084
313 Leu Ala Leu Leu Glu Asn Thr Pro Asp His Glu Trp Cys Met Ser Lys
314              650              655              660
316 att gtt agc aca tta gtg ggc gat aga caa aat act gat aaa atg ctt    2132
317 Ile Val Ser Thr Leu Val Gly Asp Arg Gln Asn Thr Asp Lys Met Leu
318          665              670              675
320 ttg tat gca gaa aat cac aac cag tcc att tct gga ggt cgt tcc ttc    2180
321 Leu Tyr Ala Glu Asn His Asn Gln Ser Ile Ser Gly Gly Arg Ser Phe
322     680              685              690
324 gca gaa ata ctg att ggt aac tcc ttg ggg aaa tct tcc ata tca caa    2228
325 Ala Glu Ile Leu Ile Gly Asn Ser Leu Gly Lys Ser Ser Ile Ser Gln
326 695              700              705              710
328 gag tca tta ctt aga ggc tgc tcg tta cac aag atg atc aga tta att    2276
329 Glu Ser Leu Leu Arg Gly Cys Ser Leu His Lys Met Ile Arg Leu Ile
330              715              720              725
332 aca tct aca att ggt ggt cat gca tac ctc aac ttc atg ggc aat gaa    2324
333 Thr Ser Thr Ile Gly Gly His Ala Tyr Leu Asn Phe Met Gly Asn Glu
334              730              735              740
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337 Phe Gly His Pro Lys Arg Val Glu Phe Pro Met Ser Ser Asn Asn Phe
338          745              750              755
340 tcc ttt tca ctg gct aac cgt cgc tgg gat cta ttg gaa gat gtt gta    2420
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342     760              765              770
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345 His Tyr Gln Leu Phe Ser Phe Asp Lys Asp Met Met Asp Leu Asp Lys
346 775              780              785              790
348 aat ggg aga att ttg tcc aga ggt ctt gcc aac att cac cat gtc aat    2516
349 Asn Gly Arg Ile Leu Ser Arg Gly Leu Ala Asn Ile His His Val Asn
350              795              800              805
352 gat act acc atg gtg att tct tac ttg aga ggt ccc aat ctc ttt gtg    2564
353 Asp Thr Thr Met Val Ile Ser Tyr Leu Arg Gly Pro Asn Leu Phe Val
354              810              815              820
356 ttc aac ttt cat cct gtc aat tca tat gaa aga tac att ata ggt gtg    2612
357 Phe Asn Phe His Pro Val Asn Ser Tyr Glu Arg Tyr Ile Ile Gly Val
358          825              830              835
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L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date